



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/705,733	11/10/2003	Thomas C. Mercer	59360US002	4297

7590 01/12/2007  
Melissa E. Buss  
Office of Intellectual Property Counsel  
3M Center, Bldg. 220-11W-01  
P.O. Box 33427  
St. Paul, MN 55133-1000

EXAMINER
----------

LAI, ANNE VIET NGA

ART UNIT	PAPER NUMBER
----------	--------------

2612

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/12/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/705,733

Applicant(s)

MERCER ET AL.

Examiner

Anne V. Lai

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 17-33 is/are rejected.
- 7) ☒ Claim(s) 10, 12-16, 26 and 34 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 10 and 26 are objected to because of the following informalities:

Claim 10 is dependent of itself.

In claim 26, third line, the second "is" should be changed to - - if - -.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Dettloff [US. 6,388,628].

In claim 1, Dettloff discloses a method, comprising:

selectively interrogating radio frequency identification tags in an interrogation corridor such that only those tags having a selected value in a specified memory location respond to the interrogation;

simultaneously receiving a response from all of the radio frequency identification tags having the selected value in the specified memory location; and

detecting at least one radio frequency identification tag having the selected value in the specified memory location in the interrogation corridor if at least a partial

Art Unit: 2612

response is received (col. 5, l. 60- col. 6, l. 32; col. 21, l. 16-49; partial ID, col. 22, l. 61-64).

In claim 3, Dettloff discloses the step of selectively interrogating further comprises commanding the radio frequency identification tags having the selected value in the specified memory location to respond to the interrogation at the same time (col. 5, l. 60- col. 6, l. 19).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2, 4-9, 18-22, and 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dettloff in view of Garber [US. 6,232,870] or Fukuoka [US. 2004/0085208].

In claim 2, Dettloff does not disclose alarm indication if an RFID having a specified value is detected. Garber teaches an RFID tag having a stored value indicating a class of items, scanning the items and providing indication if the value is detected (claims 1-4) (see also Fukuoka, par. 38-39, 112, 114, 145, 146). It would have been obvious detecting a specific value or class identifier in a tag and generating indication is a common practice for an ordinary skill in the art.

In claim 4, Dettloff discloses interrogating comprises sending "Group ID" having a selected value (Application Family AFI would be obvious) (col. 21, l. 16-49; col. 23, l. 6-25). Fukuoka teaches AFI memory set to selected value (par. 38-39).

In claims 5-9, Dettloff does not disclose the AFI memory location is set to a check-in value. Garber teaches an RFID tag could maintain a memory location to indicate the check-in status of an item (col. 17, l. 3-5) and generate indication when compare RFID memory data with an established criteria providing a match (col. 16, l. 61-64; unauthorized removal of articles col. 1, l. 30-31) (see also Fukuoka, par. 38-39, 112, 114, 145, 146). It would have been obvious to an ordinary skill in the art to set a check-in value to a tag memory and read that memory first in a root search process for speeding up the checking process.

In claims 18-19, Dettloff discloses a method comprising:

interrogating radio frequency identification tags in an interrogation corridor to identify presence of those tags having a selected value in a specified memory location; simultaneously receiving a response from all of the radio frequency identification tags in the interrogation corridor;

detecting a collision in at least two bits of the specified memory location; and

detecting at least one radio frequency identification tag having the selected value (specified bit value) in the specified memory location in the interrogation corridor if a collision is detected (conflict when responding within the same time slot) (col. 5, l. 60-col. 6, l. 32; col. 23, l. 6-25). Dettloff uses two bits for collision detection instead of one bit, however, for an ordinary skill in the art, the number of bits can be based on design

Art Unit: 2612

choice, for example only one bit of "1" or "0" would be needed for marking an item for check-in or check-out (Fukuoka, par. 38, 39, 112, 145, 146).

In claim 20, Garber teaches detecting the check-in status of a tag, therefore it would have been obvious if there is no collision is detected the detecting algorithm would need to further determine whether tags has the check-in status.

In claim 21, Dettloff discloses an N-ary tree to detect at least one RFID that has a selected value (col. 23, l. 6-25, col. 21, l. 16-49).

In claim 22, if the received response indicates that the specified memory location of the tag does not contain the selected value then it would have been obvious there is no tag having that value in the corridor.

In claim 31, Dettloff discloses a method, comprising: detecting a collision between communications from radio frequency identification tags in an interrogation corridor (the reader receives response from two tags in the field having different group ID), and mark them for further investigation (col. 23, l. 6-25).

Dettloff states that the reader marks those responding tags for further investigation however alarm is not stated. Garber teaches generating an alarm when particular established criteria are detected (col. 16, l. 61-64). It would have been obvious the device of Dettloff can be set to generating an alarm when a different value indicating collision is detected as design choice.

In claim 32, Dettloff discloses a method, comprising: receiving a partial response from an RFID tag to determine the presence of the tag at the detecting field. Garber

Art Unit: 2612

teaches generating an alarm upon detection of a partial response such as the check-in status (see Garber col. 17, l. 3-5, claim 4; and Fukuoka par. 145-146).

In claim 33, although not disclosed, the partial response of Dettloff combined obviously comprises a start of frame because this field is the first one to be sent out in packet frame transmission. Fukuoka teaches the partial response comprises a SOF (par. 145).

6. Claims 10, 11 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dettloff combined in view of Shuey [US. 6,816,538].

In claims 10 and 30, Dettloff does not disclose determine whether a valid start-of-frame (SOS) field was received. Shuey teaches in digital communication the determination of whether a valid start-of-frame (SOS) field was received is common practice to determine whether the signal reception is reliable.

In claim 11, it would have been obvious to an ordinary skill in the art, if a valid SOF were not received then there would be no RFID tag having a selected value responsive to the interrogation.

7. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dettloff in view of Ginter [US. 5,910,987].

In claim 17, Dettloff does not disclose creating a key for destroy command. Ginter teaches creating a key for destroy command (col. 57, l. 30-51). It would have been obvious to an ordinary skill in the art, implementing a destroy command feature provide the user the ability to destroy an electronic article when it is subject to theft or tampering.

Art Unit: 2612

8. Claims 23-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dettloff alone (see claims 1 and 3) or Dettloff combined with Garber or Fukuoka above.

In claims 23-29, Dettloff does not specify a computer readable medium in details however it would have been obvious to an ordinary skill in the art at the time the invention was made, to perform the method as claimed a computer readable medium would be needed (see rejections claims 1-3, 7-10).

In claim 29, Dettloff discloses validation check of the received response (col. 23, l. 55-57).

#### ***Allowable Subject Matter***

9. Claims 12-16 and 34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anne V. Lai whose telephone number is 571-272-2974. The examiner can normally be reached on 9:00 am to 6:30 pm, Monday to Thursday.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hofsass Jeffery can be reached on 571-272-2981. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 2612

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AVL  
12/18/06



**JEFFERY HOFSSASS**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :5/3/04, 5/14/04, 2/22/05, 4/21/05, 11/30/05 and 6/15/06.